

D 309

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2003.

Fourth Semester

Textile Technology

TT 231 — COMPUTER APPLICATIONS IN TEXTILE TECHNOLOGY

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. List down the advantages of computer aided textile designing.
2. Differentiate between RAM and ROM.
3. Convert $(19.25)_{10}$ into Binary.
4. List down 4 operations which can be effectively controlled using computers in the Garment unit.
5. What are the functions of computer monitoring system in a Loom shed?
6. What are the various functions that can be controlled by a computer in the wet processing unit?
7. What are the applications of Data Base Management Softwares in the Spinning Department?
8. What do you understand by PERT and CPM?
9. What are the function of production Data Collection system in Ring frame?
10. List down the computer application fields in the Textile Industry.

PART B — (5 × 16 = 80 marks)

Answer ALL questions.

11. Explain the Architecture of a Digital Computer with a functional block diagram? What are the functions and characteristics of Input and Output devices of a computer?

12. (a) What is computer image processing? Explain the principle of image processing with a functional block diagram and explain how it can be used to identify fabric defects.

Or

- (b) What do you understand by on-line quality control? Explain with a suitable example, the role of computers in the online quality control in the spinning preparatory processes.

13. (a) What is inventory control? How will you control inventory in a Textile Industry with help of data base softwares and computers? Explain with flow chart?

Or

- (b) What is Linear Programming Technique? How will you apply Linear programming technique for optimising mixing cost and quality? Explain.

14. (a) Design and Develop a computerised production/quality data collection system for a spinning mill? Explain with functional block diagram.

Or

- (b) What is computer colour matching? Explain the concept of computer colour matching.

15. (a) What do you understand by CAD? Explain stepwise about the development of Jacquard Design.

Or

- (b) What are the image drawing softwares available? How will you develop print designs? Develop a dobby design using CAD. Explain stepwise.